[P-48]

INHALATION TOXICITY STUDY ON H MENTHOL (NICOTINE FREE-TOBACCO FREE) HERBAL CIGARETTES

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Nowadays a huge variety of products that aim to assist to quit smoking or reduce addictive symptoms are developed and manufactured with safety evaluation, but the safety of the most recent products of interest which do not contain tobacco and nicotine, and shape cigarettes is not evaluated and guaranteed relatively.

This study was carried out to evaluate the single and repeated dose inhalation toxicity and genotoxicity of H menthol (Nicotine free-tobacco free) herbal cigarettes provided by Cigastop Ltd. in ICR mice.

In this study, doses which we determined to expose to mice were 40 cigarettes for 6 hours a day to mice in single dose and 20 (high dose), 10 (middle dose) and 5 cigarettes (low dose) a day for 28 days in repeated dose inhalation toxicity, in vivo chromosome aberration test and micronucleus test. The particulate substances from H menthol herbal cigarettes also were gathered and used in the Salmonella typhimurium/microsome assay (Salmonella test; Ames test).

We could find neither significant changes between control and treatment groups nor dose-response effects of test material at all except serum Ca level of female middle dose treatment group in repeated dose inhalation toxicity test.

In conclusion, H menthol herbal cigarettes, when applied clinically intended dose we used, might not show any toxic and/or mutagenic effect.

keyword: Inhalation toxicity test, Herbal cigarette, Genotoxicity